

### 3. **REGULATIONS**

#### A. **Fire Protection in Shipyard Employment (OSHA)**

On December 11, 2002, (67 FR 76213-76253), the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor, published a proposed rule (29 CFR part 1915) concerning fire protection standards for shipyard employment. This proposed rule contains comprehensive standards for the protection of shipyard workers from the hazards of fire on both the land side and on board vessels. The proposed standards reflect new technologies and current national consensus standards. The proposal collects all fire-related safety practices into a single subpart, which will make them more accessible and more easily understood by employers and employees. The standards will provide increased protection of shipyard employment workers from fire hazards. Topics addressed include: general provisions, fire safety plan, precautions for hot work, fire watches, fire response, hazards of fixed extinguishing systems on board vessels and vessel sections, land-side fire protection systems, and training.

According to OSHA, employees in shipyard employment are subject to a high risk of injury and death from fires and explosions during ship repair, shipbuilding, shipbreaking, and related work activities, as well as firefighting activities. Many of the basic tasks involved in shipyard employment, such as welding, grinding, and cutting metal with torches, provide an ignition source for fires. There are also many combustible sources on vessels and in shipyards, including flammable fuels and cargo on vessels, wood structures, building materials, and litter. When cutting torches are used in enclosed or confined spaces, accidental oxygen-enriched atmospheres can cause normally fire-resistant materials to readily burn. When fires do occur, employees are often working in confined or enclosed spaces that may make escape difficult or impossible, and result in atmospheres of combustible gases, toxic fumes, or oxygen-depleted air. Shipyard workers are therefore at risk from fires that can result in burns, death, explosions, toxic gases and fumes, and asphyxiation.

In addition, employees are also at special risk when fighting fires in shipyards. Fighting fires at shoreside facilities in shipyards can be similar to structural firefighting at typical industrial manufacturing facilities. However, firefighting on board vessels can be considerably different from structural firefighting. When traditional structural firefighting techniques are used on vessel fires, the result can be catastrophic. The potential is much greater for serious injury to firefighting personnel when tactics do not reflect the unique nature of ship firefighting.

For further information, contact Ms. Bonnie Friedman, Office of Information and Consumer Affairs, Occupational Safety and Health Administration, U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210, (telephone: (202) 693-1999). For an electronic copy of the published proposed rule, refer to the following U.S. Government Printing Office Internet Web Site (page down to access the OSHA proposed rule):  
[http://www.access.gpo.gov/su\\_docs/fedreg/a021211c.html](http://www.access.gpo.gov/su_docs/fedreg/a021211c.html).

B. Ballast Water Management Reports (CG)

On January 6, 2003, (68 FR 523-530), the U.S. Coast Guard (CG) published a proposed rule (33 CFR part 151) concerning penalty provisions for non-submission of Ballast Water Management Reports. The Coast Guard is also proposing to widen the applicability of the reporting and recordkeeping requirements to all vessels bound for ports or places within the United States, with minor exceptions. These proposed actions would increase the Coast Guard's ability to protect against introductions of new aquatic invasive species via ballast water discharges, as required by the Nonindigenous Aquatic Nuisance Prevention and Control Act (NANPCA) and the National Invasive Species Act (NISA).

In related actions, the Coast Guard is: (1) developing regulations to convert the voluntary guidelines in 33 CFR part 151, subpart D, to a mandatory ballast water management (BWM) program; and (2) planning on promulgating rules to allow for approval of shipboard installations of experimental ballast water treatment (BWT) technologies.

For further information, contact Mr. Bivan Patnaik, Environmental Standards Division, Office of Operating and Environmental Standards (G-MSO), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593, (telephone: (202) 267-1744, electronic mail: [bpatnaik@comdt.uscg.mil](mailto:bpatnaik@comdt.uscg.mil)).

C. Harmonization with International Hazardous Materials Transportation Standards (RSPA)

On January 8, 2003, (68 FR 1013-1015), the Research and Special Programs Administration (RSPA), U.S. Department of Transportation, published a final rule (49 CFR part 171) that amends the Hazardous Materials Regulations (HMR) by updating the incorporation by reference materials to include the most recent amendments to the International Maritime Dangerous Goods Code (IMDG Code), the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions), and the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations). This action is necessary to facilitate the continued transport of hazardous materials in international commerce by vessel and aircraft after these international standards become effective.

Amendment 31 to the IMDG Code, which was recently published by the International Maritime Organization (IMO), contains miscellaneous changes to the IMDG Code concerning classification, labeling, packaging, and documentation. The IMO has established January 1, 2003, as the implementation date for these amendments and is authorizing a 1-year transition period, until January 1, 2004, for compliance with the new requirements. Both the 2003-2004 edition of the ICAO Technical Instructions and the 12<sup>th</sup> revised edition of the UN Recommendations are effective on January 1, 2003.

For further information, contact Ms. Joan McIntyre, Office of Hazardous Materials Standards (DHM-10), Research and Special Programs Administration, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590, (telephone: (202) 366-8553, electronic mail: [joan.mcintyre@rspa.dot.gov](mailto:joan.mcintyre@rspa.dot.gov)).

D. Allowance System for Controlling HCFC Production (EPA)

On January 21, 2003, (68 FR 2819-2863), the U.S. Environmental Protection Agency (EPA) published a final rule (40 CFR part 82) that establishes an allowance system to control the U.S. consumption and production of ozone-depleting substances (ODSs) known as hydrochlorofluorocarbons (HCFCs). While much less destructive to the stratospheric ozone layer than chlorofluorocarbons (CFCs), HCFCs do contribute to ozone depletion and alternatives are generally available. The HCFC allowance system is part of EPA's program to reduce the emissions of ODSs to protect the stratospheric ozone layer. Protection of the stratospheric ozone layer helps reduce rates of skin cancer and cataracts. The United States is obligated under the Montreal Protocol on Substances that Deplete the Ozone Layer to limit HCFC consumption to a specific level and to reduce it in a step-wise fashion beginning on January 1, 2004. The United States has also agreed to limit production to a specific level beginning on January 1, 2004. This action also includes a petition process for exemptions to the January 1, 2003, phaseout of HCFC-141b.

Under the Montreal Protocol, the United States and other industrialized countries that are parties to the Protocol have agreed to limit production and consumption of HCFCs and to phase out consumption in a step-wise fashion over time, culminating in a complete phaseout in 2030. Title VI of the Clean Air Act authorizes the EPA to promulgate regulations to manage the consumption and production of HCFCs until the total phaseout in 2030.

For further information, contact Ms. Vera Au, Global Programs Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, (telephone: (202) 564-2216).

E. Control of Air Pollution from New Marine Diesel Engines (EPA)

On February 28, 2003, (68 FR 9745-9789), the U.S. Environmental Protection Agency (EPA) published a final rule (40 CFR parts 9 and 94) establishing near-term Tier 1 emission standards for new marine diesel engines installed on vessels flagged or registered in the United States with a displacement at or above 30 liters per cylinder. These standards are equivalent to the internationally negotiated standards of the International Maritime Organization (IMO) for oxides of nitrogen and will be enforceable under U.S. law for new engines built on or after January 1, 2004. The certification and compliance program for these standards is similar to the internationally negotiated program, but contains additional provisions that reflect the requirements of the Clean Air Act. These standards will apply until EPA adopts a second tier of standards in a future rulemaking. In developing the future rulemaking, which will be completed no later than April 27, 2007, EPA will consider the state of technology that may permit deeper emission reductions and the status of international action at the IMO for more stringent standards. EPA will also consider the application of such a second tier of standards to engines on foreign vessels that enter U.S. ports.

In this rulemaking, EPA also adopted additional standards for new engines on U.S.-flag vessels with displacements at or above 2.5 liters per cylinder but less than 30 liters per cylinder. These

standards, which currently are voluntary, are also equivalent to the internationally negotiated standards for oxides of nitrogen. These standards will apply through 2006. Beginning in 2007, the more stringent Tier 2 standards, which were finalized for these Category 1 and 2 engines in 1999, will go into effect (64 FR 73299-73373; December 29, 1999; 40 CFR parts 89, 92, and 94). The Tier 2 standards for the new Category 1 and 2 marine diesel engines address oxides of nitrogen (NO<sub>x</sub>), particulate matter (PM), carbon monoxide (CO), and hydrocarbon (HC) emissions.

The international standards to prevent and control air pollution from ships are contained in Annex VI of the 1973 International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978, (MARPOL Annex VI). Regulation 13 of MARPOL Annex VI provides for emission limits of NO<sub>x</sub> that range between 9.8-17.0 grams per kilowatt-hour depending on engine speeds ranging between less than 130 to greater than 2000 revolutions per minute. Slower engine speeds are permitted the higher emission limits.

EPA has not set standards for the fuel used by marine diesel engines in this Tier 1 final rule. To obtain the benefits of lower sulfur fuel, EPA plans to investigate designation of one or more coastal areas in the United States as sulfur oxides (SO<sub>x</sub>) emission control areas pursuant to the international process for this purpose (MARPOL Annex VI, regulation 14).

EPA believes that this two-step approach is the most appropriate means to address emissions from Category 3 marine diesel engines in the near-term in the face of incomplete information and the significant changes underway in applying emission-reduction technology to very large marine engines. The United States has taken a leadership role for the development of more stringent emission standards at the IMO and has requested the IMO to begin consideration of a second tier of international standards. Those discussions are likely to begin in 2004, after Annex VI enters into force, or as part of a review process if enough nations have not ratified it by the end of 2003. A new set of internationally negotiated marine diesel engine standards would apply to engines on all vessels, regardless of where they are flagged. Adoption of appropriate international consensus standards has the clear potential to maximize the level of emission reductions from domestic and international vessels.

For further information, contact the Office of Transportation and Air Quality, Assessment and Standards Division, U.S. Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105, (telephone: (734) 214-4636, electronic mail: [asinfo@epa.gov](mailto:asinfo@epa.gov)). The final rulemaking package is available on the following EPA Internet Web Site:

<http://www.epa.gov/otaq/marine.htm>. In addition, for an electronic copy of the published final rule, refer to the following U.S. Government Printing Office Internet Web Site (page down to access the EPA final rule): [http://www.access.gpo.gov/su\\_docs/fedreg/a030228c.html](http://www.access.gpo.gov/su_docs/fedreg/a030228c.html).